b) detecting binding of the polypeptide of claim 1 to the compound, thereby identifying a compound that specifically binds to the polypeptide of claim 1.

26. A method of screening for a compound that modulates the activity of the polypeptide of claim 1, said method comprising:

a) combining the polypeptide of claim 1 with at least one test compound under conditions permissive for the activity of the polypeptide of claim 1,

b) assessing the activity of the polypeptide of claim 1 in the presence of the test compound, and

c) comparing the activity of the polypeptide of claim 1 in the presence of the test compound with the activity of the polypeptide of claim 1 in the absence of the test compound, wherein a change in the activity of the polypeptide of claim 1 in the presence of the test compound is indicative of a compound that modulates the activity of the polypeptide of claim 1.

27. A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 5, the method comprising:

a) exposing a sample comprising the target polynucleotide to a compound, and

b) detecting altered expression of the target polynucleotide.

28. A method for assessing toxicity of a test compound, said method comprising:

a) treating a biological sample containing nucleic acids with the test compound;

b) hybridizing the nucleic acids of the treated biological sample with a probe comprising at least 20 contiguous nucleotides of a polynucleotide of claim 11 under conditions whereby a specific hybridization complex is formed between said probe and a target polynucleotide in the biological sample, said target polynucleotide comprising a polynucleotide sequence of a polynucleotide of claim 11 or fragment thereof;

c) quantifying the amount of hybridization complex; and

d) comparing the amount of hybridization complex in the treated biological sample with the amount of hybridization complex in an untreated biological sample, wherein a difference in the amount of hybridization complex in the treated biological sample is indicative of toxicity of the test compound.

29. A method for screening a compound for effectiveness in altering expression of a target polynucleotide, wherein said target polynucleotide comprises a sequence of claim 5, the method comprising:

a) exposing [redacted]mple comprising the target polynucleoti[redacted] a compound, under conditions suitable for the expression of the target polynucleotide,

b) detecting altered expression of the target polynucleotide, and

c) comparing the expression of the target polynucleotide in the presence of varying amounts of the compound and in the absence of the compound.

30. A method of claim 9, wherein the polypeptide has the sequence of SEQ ID NO:1.

31. A method of claim 9, wherein the polypeptide has the sequence of SEQ ID NO:2.

32. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:1.

33. A polypeptide of claim 1, comprising the amino acid sequence of SEQ ID NO:2.

34. A polynucleotide of claim 11, comprising the polynucleotide sequence of SEQ ID NO:3.

35. A polynucleotide of claim 11, comprising the polynucleotide sequence of SEQ ID NO:4.

36. A diagnostic test for a condition or disease associated with the expression of human detoxification proteins (DETX) in a biological sample comprising the steps of:

a) combining the biological sample with an antibody of claim 10, under conditions suitable for the antibody to bind the polypeptide and form an antibody:polypeptide complex; and

b) detecting the complex, wherein the presence of the complex correlates with the presence of the polypeptide in the biological sample.

37. The antibody of claim 10, wherein the antibody is:

a) a chimeric antibody,

b) a single chain antibody,

c) a Fab fragment,

d) a $F(ab')_2$ fragment, or

e) a humanized antibody.

38. A composition comprising an antibody of claim 10 and an acceptable excipient.

39. A method of diagnosing a condition or disease associated with the expression of human

detoxification prote[redacted]DETX) in a subject, comprising adminis[redacted]g to said subject an effective amount of the composition of claim 38.

40. A composition of claim 38, wherein the antibody is labeled.

41. A method of diagnosing a condition or disease associated with the expression of human detoxification proteins (DETX) in a subject, comprising administering to said subject an effective amount of the composition of claim 40.

42. A method of preparing a polyclonal antibody with the specificity of the antibody of claim 10 comprising:

a) immunizing an animal with a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, or an immunogenic fragment thereof, under conditions to elicit an antibody response;

b) isolating antibodies from said animal; and

c) screening the isolated antibodies with the polypeptide, thereby identifying a polyclonal antibody which binds specifically to a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

43. An antibody produced by a method of claim 42.

44. A composition comprising the antibody of claim 43 and a suitable carrier.

45. A method of making a monoclonal antibody with the specificity of the antibody of claim 10 comprising:

a) immunizing an animal with a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2, or an immunogenic fragment thereof, under conditions to elicit an antibody response;

b) isolating antibody producing cells from the animal;

c) fusing the antibody producing cells with immortalized cells to form monoclonal antibody-producing hybridoma cells;

d) culturing the hybridoma cells; and

e) isolating from the culture monoclonal antibody which binds specifically to a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

46. A monoclonal antibody produced by a method of claim 45.

47. A composition comprising the antibody of claim 46 and a suitable carrier.

48. The antibody of claim 10, wherein the antibody is produced by screening a Fab expression library.

49. The antibody of claim 10, wherein the antibody is produced by screening a recombinant immunoglobulin library.

50. A method for detecting a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 in a sample, comprising the steps of:

a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and

b) detecting specific binding, wherein specific binding indicates the presence of a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 in the sample.

51. A method of purifying a polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2 from a sample, the method comprising:

a) incubating the antibody of claim 10 with a sample under conditions to allow specific binding of the antibody and the polypeptide; and

b) separating the antibody from the sample and obtaining the purified polypeptide having an amino acid sequence selected from the group consisting of SEQ ID NO:1 and SEQ ID NO:2.

52. A microarray wherein at least one element of the microarray is a polynucleotide of claim 12.

53. A method for generating a transcript image of a sample which contains polynucleotides, the method comprising the steps of:

a) labeling the polynucleotides of the sample,

b) contacting the elements of the microarray of claim 52 with the labeled polynucleotides of the sample under conditions suitable for the formation of a hybridization complex, and

c) quantifying the expression of the polynucleotides in the sample.

54. An array comprising different nucleotide molecules affixed in distinct physical locations on a solid substrate, wherein at least one of said nucleotide molecules comprises a first

oligonucleotide or p[redacted]ucleotide sequence specifically hybridiz[redacted] with at least 30 contiguous nucleotides of a target polynucleotide, said target polynucleotide having a sequence of claim 11.

55. An array of claim 54, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 30 contiguous nucleotides of said target polynucleotide.

56. An array of claim 54, wherein said first oligonucleotide or polynucleotide sequence is completely complementary to at least 60 contiguous nucleotides of said target polynucleotide.

57. An array of claim 54, which is a microarray.

58. An array of claim 54, further comprising said target polynucleotide hybridized to said first oligonucleotide or polynucleotide.

59. An array of claim 54, wherein a linker joins at least one of said nucleotide molecules to said solid substrate.

60. An array of claim 54, wherein each distinct physical location on the substrate contains multiple nucleotide molecules having the same sequence, and each distinct physical location on the substrate contains nucleotide molecules having a sequence which differs from the sequence of nucleotide molecules at another physical location on the substrate.